

PUBLIC NOTICE

US Army Corps of Engineers New York District Jacob K. Javits Federal Building New York, N.Y. 10278-0090 ATTN: Regulatory Branch

In replying refer to:

Public Notice Number: 2001-01360-J2

Issue Date: December 21, 2001

Expiration Date: February 4, 2002

REQUEST FOR PUBLIC COMMENT

AND

ANNOUNCEMENT OF A PUBLIC HEARING

The New York District, Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 103 of the Marine Protection, Research & Sanctuaries Act of 1972.

APPLICANT:

Port Authority of New York and New Jersey

Port Authority Technical Center

241 Erie Street

Jersey City, NJ 07310-1397

ACTIVITY:

Drilling, Blasting and Dredging with Upland Beneficial Reuse, Open Water

Disposal, and Ocean Placement at the Historic Area Remediation Site

WATERWAY: Kill Van Kull and Newark Bay at Bergen Point Turn

LOCATION:

City of Bayonne, Hudson County, New Jersey

The U.S. Army Corps of Engineers, New York District will conduct a PUBLIC HEARING to gather information to assist in its review of this permit application. The details of the hearing

DATE:

Thursday, January 24, 2002

TIME:

Afternoon Session - 3:30 PM to 5:30 PM

(dinner break)

Evening Session - 7:00 PM to 10:00 PM

LOCATION:

Bayonne City Hall

630 Avenue C

City of Bayonne, Hudson County

New Jersey 07002

DIRECTIONS: See map (attached Figure 1) and written directions

The United States Army Corps of Engineers (USACE) neither favors nor opposes the proposed work. The purpose of this public notice and public hearing is to afford the Corps of Engineers the opportunity to hear from the general public on the application which is before it in order to acquire information which will be considered in evaluating whether to issue or deny the requested permit. The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed below. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act.

The decision whether to issue or deny the requested permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both the protection and utilization of important public resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general the needs and welfare of the people.

This activity is also being evaluated to determine that the proposed aquatic placement of dredged material will not unreasonably degrade or endanger human health, welfare or amenities, the marine environment, ecological systems or economic potentialities. On September 26, 2000, the US Environmental Protection Agency (USEPA) and US Army Corps of Engineers signed a Memorandum of Agreement (MOA) outlining the steps to be taken to ensure that remediation of the HARS continues in a manner appropriately protective of human health and the aquatic environment. In making the determination of which dredged materials are appropriate for use as remediation material, USEPA criteria and guidance will be applied, including the interim change to one matrix value for PCB's as described in the MOA. In addition, based upon an evaluation of the potential effect which the failure to utilize this ocean site will have on navigation, economic, and industrial development, and foreign and domestic commerce of the United States, an independent determination will be made of the need to place the dredged material in ocean waters, other possible methods of disposal, and other appropriate locations.

The PUBLIC HEARING is open to everyone. All interested individuals, groups, and agencies are invited to be present or be represented at the hearing. Everyone will be given an opportunity to express his or her views and to furnish specific data on aspects of the proposed activity. At the public hearing, any person may appear on his or her own behalf, or may be represented by counsel, or by other representatives.

Should commenters choose to write, all comment letters received in regard to this public notice will be made part of the permit application record, and will also be considered in the permit decision-making process. <u>INFORMATION SUBMITTED BY MAIL IS CONSIDERED JUST</u> AS CAREFULLY IN THE PERMIT DECISION-MAKING PROCESS AND BEARS THE SAME WEIGHT AS THAT FURNISHED AT A PUBLIC HEARING. ALL WRITTEN COMMENTS REGARDING THIS PUBLIC NOTICE MUST BE MAILED TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the activity.

The public hearing will be conducted in accordance with the procedures outlined in Title 33 of the Code of Federal Regulations, Part 327. Any person will be permitted to submit oral or written statements concerning the subject matter of the hearing that is new information and not already part of the administrative record; to call witnesses who may present oral statements; or to present recommendations as to an appropriate decision. Any person may present written statements or other additional information prior to the time the comment period is closed (Close of Business on Monday, February 4, 2002) to public submission and may present proposed findings and recommendations.

Speakers will be requested to limit their oral presentations to approximately 5 minutes. Lengthier written presentations may be submitted but the speaker will be requested to summarize the presentation in the allotted 5 minutes. Cross-examination of speakers will not be permitted.

To ensure order during the hearing, the following speaker sequence will be followed:

- Applicant's description of the proposed work; 1.
- Federal elected officials or their representatives; 2.
- Federal agencies' representatives and appointed federal officials; 3. 4.
- State elected officials or their representatives;
- State agencies' representatives and appointed state officials; 5.
- 6. County elected officials;
- County agencies' representatives and appointed county officials; 7.
- Local government officials; 8.
- Organized environmental group's representatives; 9.
- 10. Organized citizens groups' representatives; and
- 11. Private citizens.

Speakers in the respective groups not having an opportunity to present their statements during the afternoon session will be permitted to present their statements in sequential order during the evening session.

The public hearing will be reported verbatim. Copies of the proceedings (i.e., transcript) will be available for public inspection at the Corps of Engineers New York District office after the close of the comment period and may be purchased from the Corps of Engineers by any person or group. The cost of a copy will correspond directly to the number of pages enclosed within the transcript. All attendees of the public hearing will be contacted by mail after the close of the comment period as to the exact addresses where the transcript can be inspected and/or

purchased.

All written statements, charts, tabulations, and similar data offered in evidence at the hearings shall, subject to exclusion for reasons of redundancy, be received in evidence and will constitute a part of the hearing file which will become part of the administrative record for this permit action. For filing purposes it is requested that the material not exceed 8 1/2" x 14", if possible.

The hearing record will remain open until the close of business on February 4, 2002 for the receipt of additional written comments. All comments should be sent to the following address in order to be received prior to the close of the record:

New York District Corps of Engineers Regulatory Branch 26 Federal Plaza, Room 1937 New York, New York 10278-0900

The proposed project was reviewed based upon the "Biological Assessment for the Closure of the Mud Dump Site and Designation of the Historic Area Remediation Site (HARS) in the New York Bight and Apex," (USEPA, 1997). Based upon this review, and a review of the latest public listing of threatened and endangered species, it has been preliminarily determined that the proposed placement activities for which authorization is sought herein, are not likely to affect the following federally threatened or endangered species (humpback whales, finback whales, right whales, loggerhead turtles, leatherback turtles, green turtles, and Kemp's Ridley turtles) or their critical habitat pursuant to Section 7 of the Endangered Species Act (ESA; 16 USC 1531). The USACE New York District is conducting informal consultations with the National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), requires all federal agencies to consult with the National Marine Fisheries Service (NMFS) on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). Information on conditions at the project site and on the work that would be undertaken is given in the Proposed Project Description. A preliminary review of the proposal and information submitted by the applicant indicates that EFH-managed species do not heavily utilize the area and that ecological conditions favored by many of the species are not found at the site. Upland disposal would not have any effect on EFH and placement of material at the Historic Area Remediation Site would have an overall beneficial effect. The primary effects on EFH (and EFH-managed species) would be a temporary increase in turbidity due to dredging activities and disruption of demersal and pelagic habitat. The overall potential impact on EFH for designated species is small because of the temporary nature of the disturbance, the lack of specialized habitat in the area, and the low abundance of most species for which this region is designated as EFH. Therefore, based on the foregoing, the District Engineer has made the preliminary determination that the site-specific adverse effects are not likely to be substantial. Further consultation with NMFS regarding EFH impacts and conservation recommendations is being conducted and will be concluded prior to the final decision.

Based upon a review of the latest published version of the National Register of Historic Places, there are no known sites eligible for, or included in, the Register within the permit area. Presently unknown archeological, scientific, prehistorical, or historical data may be lost by work accomplished under the required permit.

Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 U.S.C. 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicant has certified in the permit application that the activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicant's certification. No permit decision will be made until one of these actions occur. For activities within the coastal zone of New Jersey the applicant's certification and accompanying information is available from the New Jersey Department of Environmental Protection, Bureau of Coastal Regulation, CN 401, 501 East State Street, Second Floor, Trenton, New Jersey 08625-0401, Telephone Number (609) 633-2289. Comments regarding the applicant's certification should be so addressed.

In addition to any required water quality certificate and coastal zone management program concurrence, the applicant has obtained or requested the following governmental authorizations:

- New Jersey Department of Environmental Protection Permits
 - Waterfront Development Permit
 - Clean Air Act Compliance Concurrence

It is requested that you communicate the foregoing information concerning the activity to any persons known by you to be interested and who did not receive a copy of this notice. If you have any questions concerning this application, you may contact this office at (212) 264-6730 and ask for Ms. Jodi McDonald. For more information on New York District Corps of Engineers programs, visit our website at http://www.nan.usace.army.mil

FOR THE DISTRICT ENGINEER:

Richard L. Tomer

Parland L. Tomer

Acting Chief, Regulatory Branch

1) Description of Work

2) Project Diagrams

Enclosures:

3) Public Hearing Location Map

4) Directions to Public Hearing Site

PROPOSED PROJECT DESCRIPTION

The Port Authority of New York and New Jersey has requested a Department of the Army permit to undertake drilling, blasting and dredging construction activities to deepen and widen the federal navigation channel's Bergen Point turn between the western Kill Van Kull and the southern portion of Newark Bay. Dredging depths would be to 52 feet below mean low water (MLW) datum with an allowable 1.5-foot overdepth in rock; and to 50 feet below MLW datum with an allowable 2-foot overdepth in sediment (Fig. 2).

The applicant states that their purpose for the proposed dredging is to achieve substantial social, environmental and economic benefits by undertaking the ongoing 45-foot deepening and anticipated future 50-foot deepening of the turn at Bergen Point of the Kill Van Kull-Newark Bay channels as a single continuous activity. The applicant believes that by undertaking the work in a single sequential fashion, (i.e. one-stage, without a time lag), drilling (noise) and blasting (vibration) effects would be minimized by limiting deepening activities to a single episode.

The Corps of Engineers is currently deepening the channels and turns of the Kill Van Kull –Newark Bay waterways to approximately –47 feet MLW datum. This is a congressionally authorized, cost-shared, capital improvement project of the existing channels. The Port Authority of New York and New Jersey intends to dredge the approximate additional five feet at this time in anticipation of a future congressionally authorized, cost-shared, capital improvement project to improve the channels to –52 feet to accrue the social, environmental and economic benefits mentioned above, and this is discussed in more detail later in this public notice.

The requested permit work would be undertaken as a continuation of work to be done in Contract Area 5 of the currently ongoing Kill Van Kull/Newark Bay (KVK/NB) Phase II Deepening Project (Fig. 3), which will deepen this area to between 47 feet and 48.5 feet below MLW including all allowable over depths.

Information regarding Contract Area 5 of the KVK/NB Phase II Deepening Project was published in Public Notice FP63-345678CC issued May 30, 2000. A summary of the work authorized by Congress in Contract Area 5 (part of the Phase II Deepening) is presented in this current public notice for informational purposes only. Public comment is invited only for those requested permit activities associated with the Port Authority's deepening below 47 feet.

Work Description:

The proposed permit work described in this current public notice involves removal of approximately 1,500,000 cubic yards of rock and sediment between the depths of 47 feet and 53.5 feet below MLW (Figs. 4a-e). The material to be removed consists of approximately 1,186,000 cubic yards of diabase rock and 314,000 cubic yards of sediment. The sediments that would be removed consist of approximately 43,000 cubic yards of Pleistocene red-brown clay, approximately 245,000 cubic yards of sand and gravel, and approximately 26,000 cubic yards of Holocene fine-grained sediment (silt and clay). The placement at the HARS of the approximately 43,000 cubic yards of Pleistocene red-brown clay would take place over 60 days.

The approximately 1,186,000 cubic yards of diabase rock would be placed in the ocean for fishing reefs. A portion of this rock could be made available for shoreline stabilization along Bayonne, New Jersey; and potential lobster or fishing reefs within the New York & New Jersey Harbor-Estuary, if separately permitted. The approximately 245,000 cubic yards of sand and gravel would be placed on the upland

for beneficial reuse. If the permit applicant cannot find an upland placement site, they are requesting permission to place the sand and gravel into the existing Newark Bay Confined Disposal Facility (subaqueous pit). The approximately 43,000 cubic yards of Pleistocene red-brown clay would be placed in the ocean as remediation material for the Historic Area Remediation Site (HARS) off of New Jersey. The approximately 26,000 cubic yards of Holocene fine-grained sediment (silt and clay) will be placed in a state-approved upland site for beneficial reuse.

Rock Removal and Placement:

The underlying diabase rock would be removed by drilling holes into the rock, which would be loaded with explosive charges and detonated. The loosened rock would then be removed using a clamshell or other mechanical dredge, i.e., marine excavator.

The diabase rock would be utilized to enhance currently existing, offshore artificial fishing reef sites (Figs. 5 and 6). The rock material could also be utilized for bank stabilization along parts of the shoreline in the City of Bayonne (Fig. 7) and/or to create/enhance lobster habitat in the Lower Bay of New York Harbor (Fig. 8). On the City of Bayonne shoreline, appropriately sized rock would be placed in areas of the shoreline that are subject to erosion. Any use of rock for creation/enhancement of lobster habitat would be in accord with plans to be developed in concert with the National Marine Fisheries Service, New York State Department of Environmental Conservation, New York State Department of State, New Jersey Department of Environmental Protection; and subject to a separate public notice.

Impacts Due to Blasting:

Quality of life impacts resulting from blasting operations would be minimized through requiring pertinent and appropriate monitoring measures, i.e. development of a blast monitoring plan, daily hourly limitations on blasting operations, adherence to all applicable Federal and local ordinances, and other applicable procedures.

Sediment Removal and Ocean Placement, Beneficial Reuse, and Upland Disposal:

The sediments would be removed using a clamshell dredge with a closed (environmental) bucket. The applicant has not requested authorization for barge overflow during removal of the sediments. The sediment to be removed would be utilized in several ways at various locations or would be disposed of at the Newark Bay Confined Disposal Facility (NBCDF) located at the City of Newark, Essex County, New Jersey (Fig. 9). Disposal at the NBCDF would occur only if there was insufficient capacity at upland beneficial reuse sites. The use of dredged sediment determined to be suitable for use as remediation material would occur at the Historic Area Remediation Site (HARS) located approximately 3.7 miles east of Sandy Hook, New Jersey (Fig. 5). Dredged sediment not suitable for use as remediation material at the HARS would be reused beneficially at a state-approved upland site.

Approximately 43,000 cubic yards of Pleistocene red-brown clay would be placed at the HARS. Pleistocene red-brown clay was previously tested to determine its suitability for use as remediation material at the ocean HARS. Notification of those tests results and a determination of its suitability for HARS remediation purposes were provided in Public Notice No. Supplement FP63-345678CC issued on July 14, 2000. Those test results are included in this current public notice (Tables 1-3) for informational purposes only.

Once dredged, the red-brown clay would be placed in bottom dump scows for transport and placement at the HARS. Transport and placement of this material would be monitored by USACE approved inspectors and by electronic devices mounted on scows to ensure proper placement at the HARS. Approximately 26,000 cubic yards of Holocene fine-grained sediment (silt and clay), which was determined to be unsuitable for use as remediation material at the HARS, would be taken to a state-

approved upland site. After dewatering and amendment using Portland cement, fly ash and/or other approved substances, it would be beneficially reused. In addition, the applicant proposes to transport 245,000 cubic yards of material (sand and gravel) to a state-approved upland site for the same beneficial reuse purposes. Alternatively, if there is insufficient capacity, this sand and gravel sediment would be transported to the NBCDF for disposal.

Ocean Placement Site:

The dredged material proposed to be taken to the HARS would be placed using the bottom dumping process in Remediation Area Number 1, which has an approximate center point located at 40° 24.835'N, 73° 52.849'W. Based upon a review of the latest published version of the National Register of Historic Places, two known wrecks were found in Remediation Area Number 1. As noted in the designation of the HARS, Remediation Material would not be allowed to be placed within 0.27 nautical miles of the identified wrecks or other wrecks that might be found. The distance from the center of Remediation Area Number 1 to either wreck is greater than 0.50 nautical miles.

Introduction To The HARS:

In 1972, the Congress of the United States enacted the MPRSA to address and control the dumping of materials into ocean waters. Title I of the Act authorized the US Environmental Protection Agency (USEPA) and the USACE to regulate dumping in ocean waters. USEPA and USACE share responsibility for MPRSA permitting and ocean disposal site management. Regulations implementing MPRSA can be found at 40 CFR Sections 220 through 229. With few exceptions, MPRSA prohibits the transportation of material from the United States for the purpose of ocean dumping except as may be authorized by a permit issued under the MPRSA. The MPRSA divides permitting responsibility between the USEPA and USACE. Under Section 102 of the MPRSA, USEPA has responsibility for issuing permits for all materials other than dredged material. Under Section 103 of MPRSA, the Secretary of the Army has the responsibility for issuing permits for dredged material. Determinations to issue MPRSA permits for dredged material are subject to USEPA concurrence.

In the fall of 1997, the USEPA de-designated and terminated the use of the New York Bight Dredged Material Disposal Site (commonly known as the Mud Dump Site or MDS). The MDS had been designated in 1984 for the disposal of up to 100 million cubic yards of dredged material from navigation channels and other port facilities within the Port of New York and New Jersey. Simultaneous with the closure of the MDS, the site and surrounding areas that had been used historically as disposal sites for dredged materials were redesignated as the HARS under authority of Section 102(c) of MPRSA at 40 CFR Sections 228.15(d)(6) (See 62 Fed. Reg. 46142 (August 29, 1997); 62 Fed. Reg. 26267 (May 13, 1997). The HARS will be managed to reduce impacts of historic disposal activities at the site to acceptable levels in accordance with 40 CFR Section 228.11(c). The need to remediate the HARS is supported by the presence of toxic effects, dioxin bioaccumulation exceeding Category 1 levels in worm tissue (a definition of which appears in a memorandum reviewing the results of the applicant's testing), as well as TCDD/PCB contamination in area lobster stocks. Individual elements of those data do not establish that sediments within the Study Area are imminent hazards to the New York Bight Apex ecosystem, living resources, or human health. However, the collective evidence presents cause for concern, and justifies the need for remediation. Further information on the conditions in the Study Area and the surveys performed may be found in the Supplemental Environmental Impact Statement (USEPA, 1997).

The designation of the HARS identifies an area in and around the MDS which has exhibited the potential for adverse ecological impacts. The HARS will be remediated with dredged material that meets current Category 1 standards and will not cause significant undesirable effects including through bioaccumulation. This dredged material is referred to as "Material for Remediation" or "Remediation Material."

Sediment from 19 different private and federal projects in the Port of New York and New Jersey has been dredged and placed as Remediation Material in the ocean since closure of the Mud Dump Site and designation of the HARS in 1997. This represents a total of approximately 7,800,000 cubic yards of material. Current estimates indicate that a minimum of 40 million cubic yards is needed to fully remediate the HARS.

The HARS, which includes the 2.2 square nautical mile area of the MDS, is an approximately 15.7 square nautical mile area located approximately 3.5 nautical miles east of Highlands, New Jersey and 7.7 nautical miles south of Rockaway, New York. The MDS is located approximately 5.3 nautical miles east of Highlands, New Jersey and 9.6 nautical miles south of Rockaway, New York. When determined by bathymetry (a map depicting the relative depths of water in a particular area) that capping is complete, USEPA will take any necessary rulemaking to de-designate the HARS. The HARS includes the following three areas:

Priority Remediation Area (PRA):

A 9.0 square nautical mile area to be remediated with at least 1 meter of Remediation Material. The PRA encompasses the area of degraded sediments as described in greater detail in the SEIS.

Buffer Zone:

An approximately 5.7 square nautical mile area (0.27 nautical mile wide band around the PRA) in which no placement of the Material for Remediation will be allowed, but may receive Material for Remediation that incidentally spreads out of the PRA.

No Discharge Zone:

An approximately 1.0 square nautical mile area in which no placement or incidental spread of Material for Remediation is allowed.

To improve management and monitoring of placement activities at the HARS, electronic monitoring equipment will be on-board any barges carrying Remediation Material to the HARS. This equipment records vessel positions throughout the duration of each trip to the HARS and during remediation operations. To improve communication reliability between tugs and scows, a prescribed formal communication procedure has been put in place (copies of this procedure are available upon request).

Additional information concerning the HARS can be obtained from Mr. Douglas Pabst of the USEPA, Team Leader of the Dredged Material Management Team, at (212) 637-3797.

HARS Suitability Testing for Pleistocene Red-Brown Clay:

Testing of the Pleistocene red-brown clay was conducted in accordance with test protocols for ocean placement established by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers. Test results in Tables 1-3 are for informational purposes only. By a Joint Memorandum for the Record signed by both agencies on January 26, 2000, the Pleistocene red-brown clay found throughout the Newark Bay Complex was found to be suitable for HARS placement and would not require further testing.

Alternatives to HARS Placement:

Regarding ocean placement of dredged material, the Ocean Dumping Regulations (Title 40 CFR Section 227.16(b) states that "...alternative methods of disposal are practicable when they are available at reasonable incremental cost and energy expenditures which need not be competitive with the costs of ocean dumping, taking into account the environmental impacts associated with the use of alternatives to ocean dumping..." USACE, New York District has evaluated the regional practicability of potential disposal alternatives in the September, 1999 Draft "Implementation Report for the Dredged Material

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Management Plan for the Port of New York and New Jersey." The Recommended Plan within the report addresses both the long and short-term dredge material placement options in two specific timeframes, heretofore referred to as the 2010 Plan and the 2040 Plan, respectively.

The 2010 Plan relies heavily on the creation, remediation, and restoration of a variety of existing degraded or impacted habitats in the region with material that would be considered unsuitable for HARS restoration. The remaining material is treated and stabilized, as needed, and then applied to remediate degraded and potentially polluting areas such as brownfields, landfills, and abandoned strip mines. Nearly all of the options considered in the 2010 Plan have a placement cost of \$29/cubic yard or higher.

Similar to the 2010 Plan, the 2040 Plan relies heavily on the use of land remediation and decontamination methods for the management of HARS unsuitable material. As in the 2010 plan, maximum use of all practicable alternatives to the HARS is envisioned.

Many of the dredged material management options presented in the 2010 Plan however, are not presently permitted and/or presently under construction at this time and therefore considered unavailable for the purposes of this application. Other options are not available at reasonable incremental costs, thus leaving HARS placement as the preferred alternative.

Project Purpose:

The applicant states that their purpose of the proposed permit application work is to achieve substantial social, environmental and economic benefits by undertaking the ongoing and anticipated future deepening of the turn at Bergen Point of the Kill Van Kull / Newark Bay Channels as a continuous activity. The currently authorized and ongoing deepening at Bergen Point to 47 to 48.5 feet below MLW by the Corps of Engineers and the anticipated future Corps of Engineers deepening there to 50 to 52 feet below MLW (plus allowable overdepths) would result in two separate drilling, blasting and dredging operations over a period of years.

The applicant believes that by undertaking the work in a single sequential fashion, (i.e. one operation, without a time lag), drilling (noise) and blasting (vibration) effects would be minimized by limiting deepening activities to a single episode of work in Contract Area 5 off of Bergen Point, Bayonne, New Jersey. The applicant believes that reducing the periods of work would benefit local communities whose quality of life has been adversely affected by previous episodes of blasting to achieve deeper channels.

Further, the applicant believes that environmental benefits would accrue from eliminating a second episode of blasting, including 1) a shorter period of habitat disturbance and, consequently, only one period of habitat restoration and 2) a reduction in water quality impacts because the duration of time during which turbidity plumes could potentially occur would be shortened. Moreover, environmental enhancements and remediation activities associated with the beneficial use of dredged material would be realized sooner if the deepening activities were to be undertaken continuously, rather than sequentially with a time lag between the two work episodes.

The applicant also states that economic benefits would be achieved by eliminating multiple mobilizations and demobilizations of dredging equipment, which could result in savings of millions of dollars.

Ongoing Congressionally-Authorized Work for the Kill Van Kull - Newark Bay Phase II Deepening Project to -47 Feet Mean Low Water Datum in Contract Area 5 at Bergen Point:

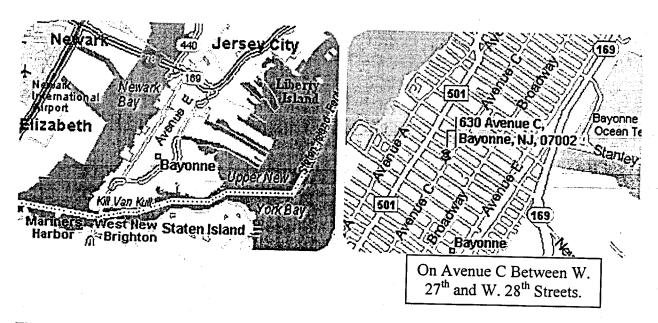
For your information, and as contained in Public Notice No. FP63-345678CC issued May 30, 2000; the following is a short informational description of the ongoing dredging in Contract Area 5 with an allowable overdepth. The contract was awarded Monday, December 10, 2001. The work includes

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dredging approximately 1.072 million cubic yards of material consisting of approximately 424,000 cubic yards of diabase rock, approximately 225,000 cubic yards of Pleistocene red-brown clay, approximately 364,000 cubic yards of gravelly sand, and 59,000 cubic yards of silt and clay with sand.

The diabase rock will be placed at existing artificial fishing reef sites in New York and/or New Jersey. The Pleistocene red-brown clay and 364,000 cubic yards of gravelly sand will be placed at the HARS. The 59,000 cubic yards of silt and clay with sand was determined to be unsuitable for use as HARS remediation material and will be taken to a permitted upland facility for beneficial reuse or disposal.

MAP AND DIRECTIONS TO BAYONNE CITY HALL 630 AVENUE C, BAYONNE, NJ 07002



FROM THE NEW JERSEY TURNPIKE:

North or South over the Turnpike Extension to Exit 14A (Bayonne Exit), keep left immediately after the toll booth and merge left at the ramp onto Avenue E, turn right on E. 31st Street, turn left onto Avenue C. No off-street parking.

ROUTES 1/9:

From the north: US 1/9 Truck route which becomes NJ-440 South, take the "Avenue C" exit and turn right at the end of the ramp, which will place you onto Avenue C.

<u>From the west</u>: Merge to the right onto NJ-440 South from US 1/9 Truck route and follow the above directions.

BAYONNE BRIDGE:

NY 440 North over the Bayonne Bridge and stay in the right lane, take the Kennedy Blvd. North ramp, turn left onto J.F. Kennedy Blvd, turn right onto W. 28th Street, turn right onto Avenue C.

PUBLIC TRANSPORTATION

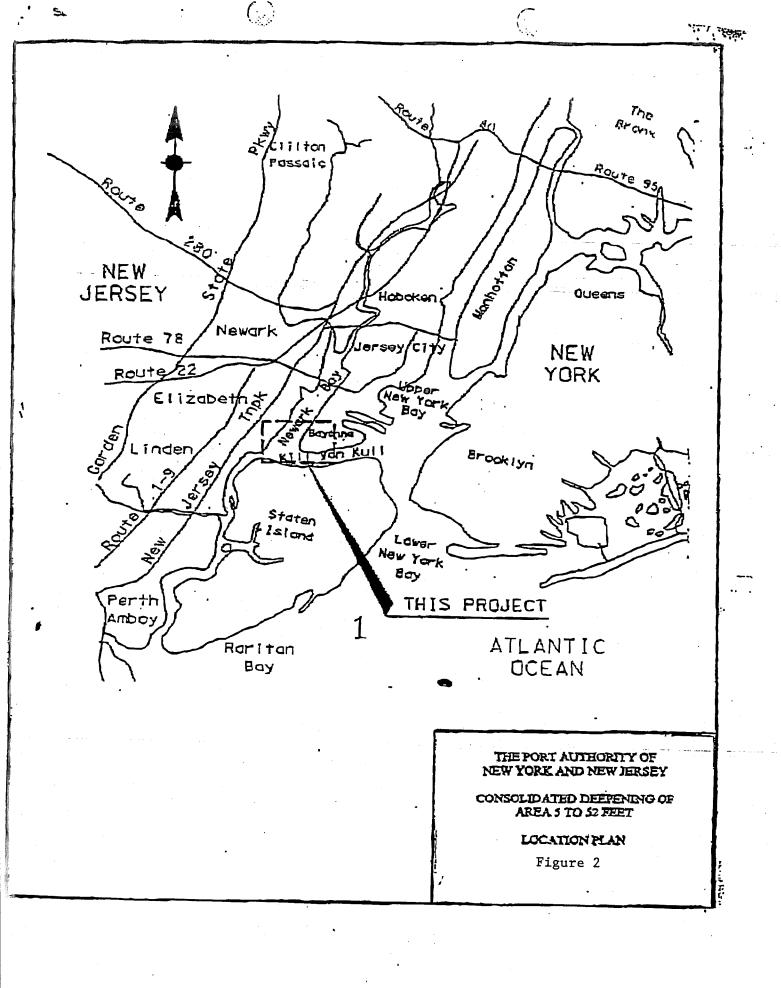
Bergen/Hudson Light Rail:

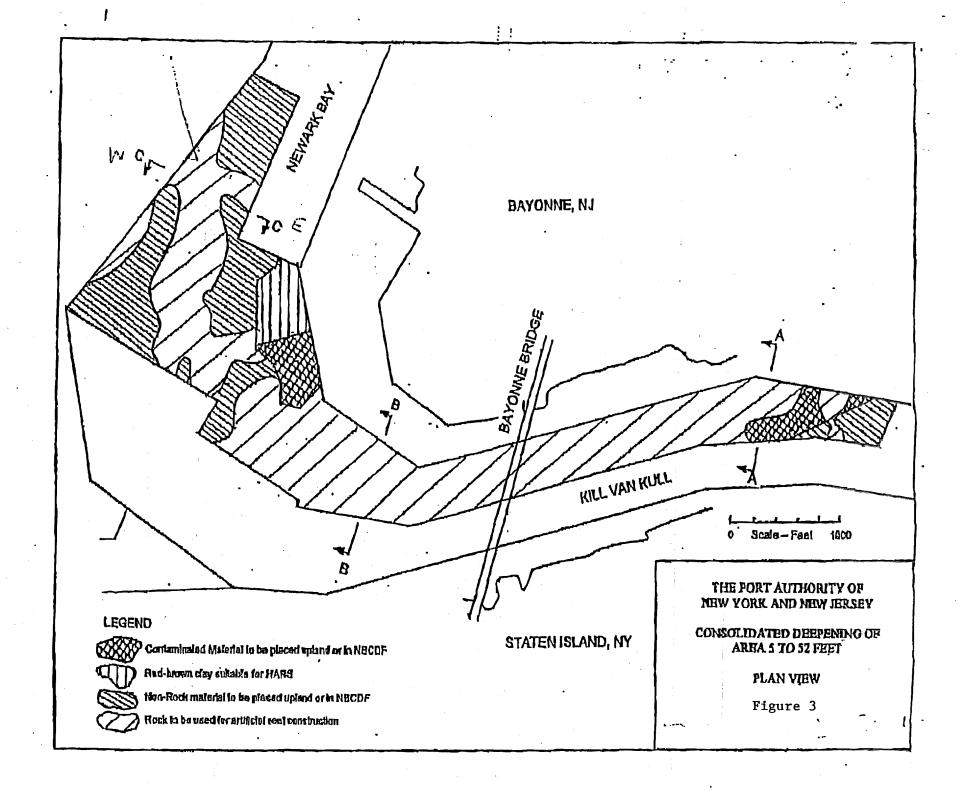
From the north only: from the Newport Centre Mall, take the Black Line to the E. 34th Street stop, exit onto Broadway, walk one block west to Avenue C, take the NJ Transit 81 south 5-6 blocks or walk.

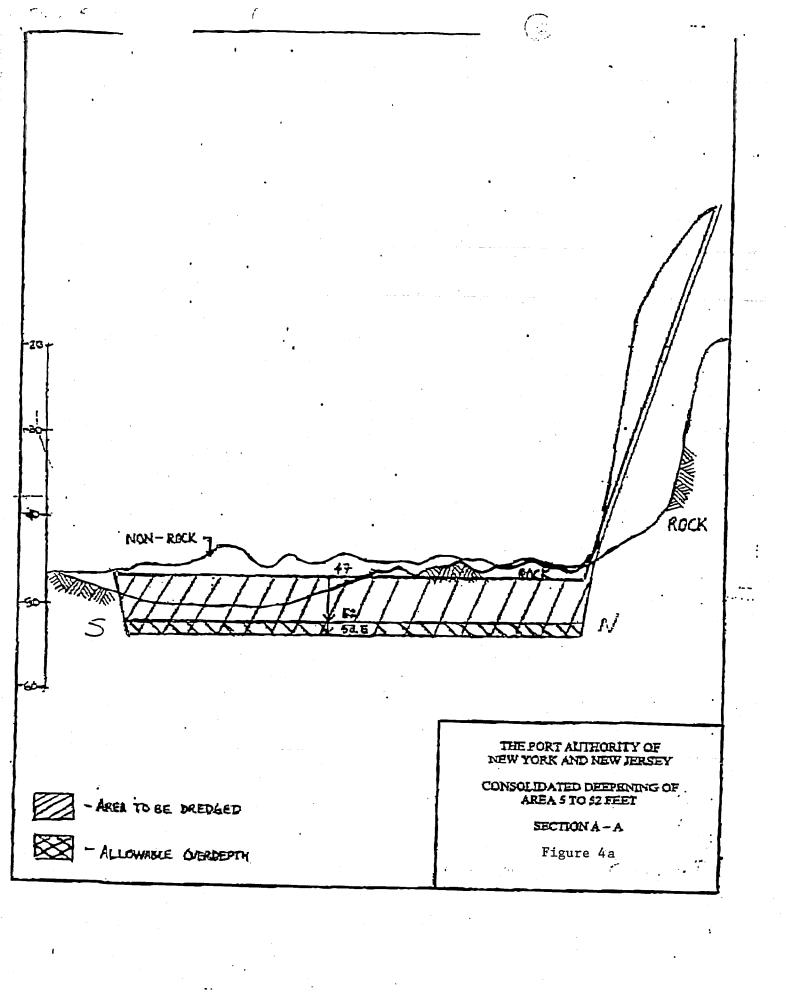
New Jersey Transit Bus:

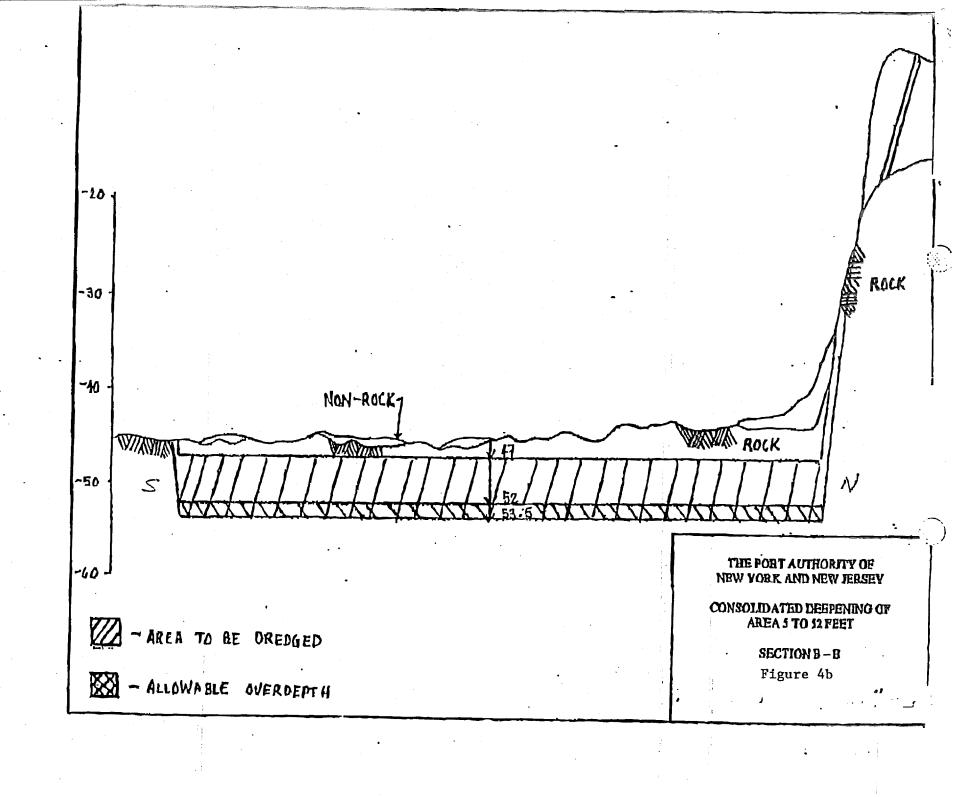
<u>From the north</u>: catch the NJT 81Greenville-Bayonne from Exchange place in Jersey City, pass W. 54th Street, then the bus makes local stops at every other upon request. Disembark at W. 28th or W. 27th Street.

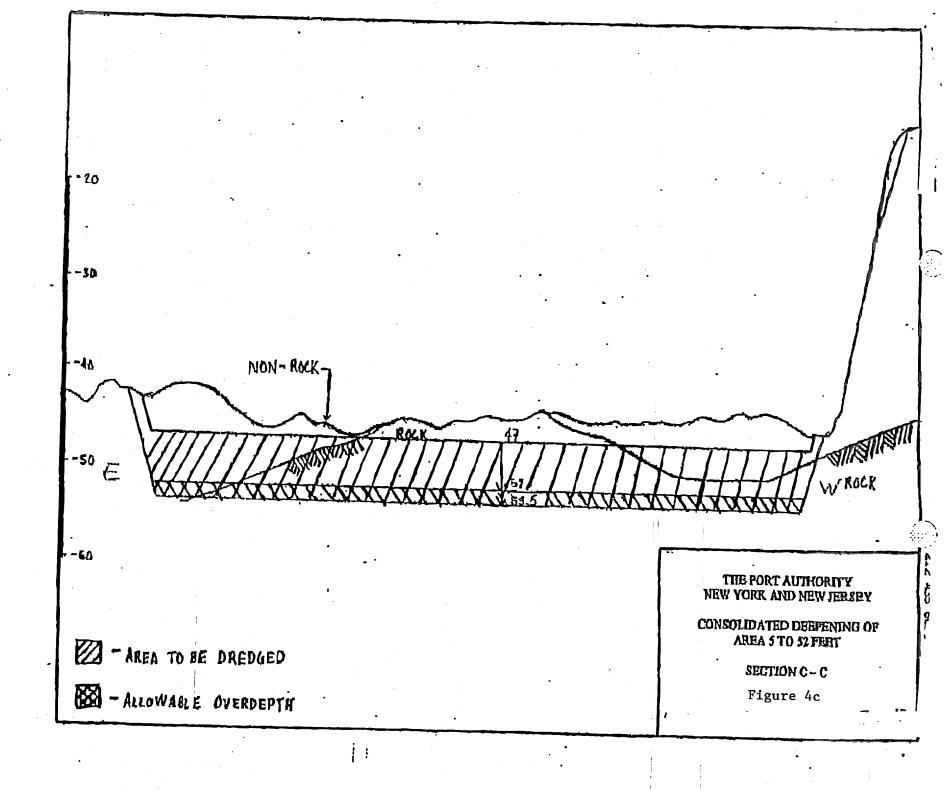
From the south: catch the NJT 81Greenville-Bayonne from W. 1st Street and Avenue C, proceed north and request a local stop at W. 27th or W. 28th Street.

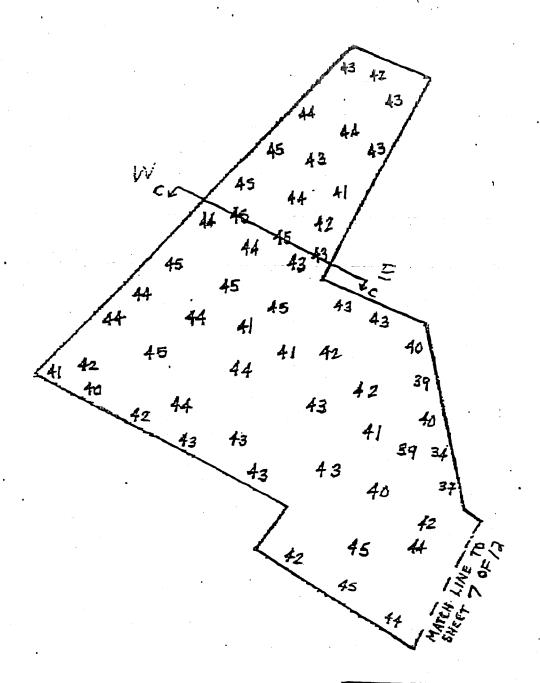










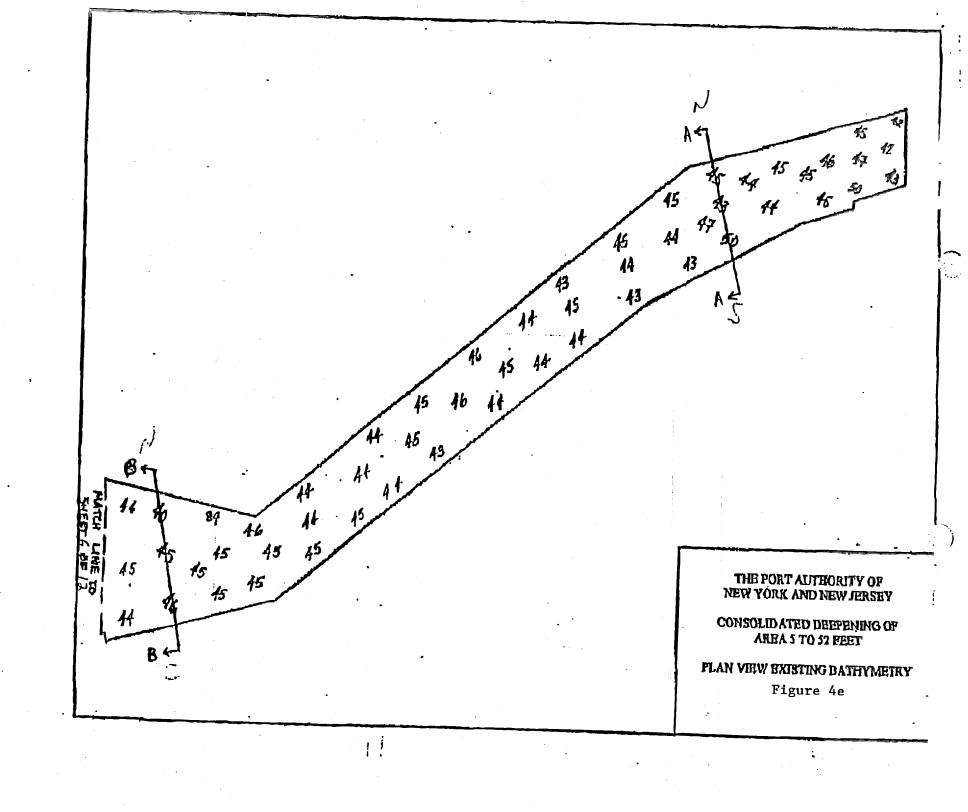


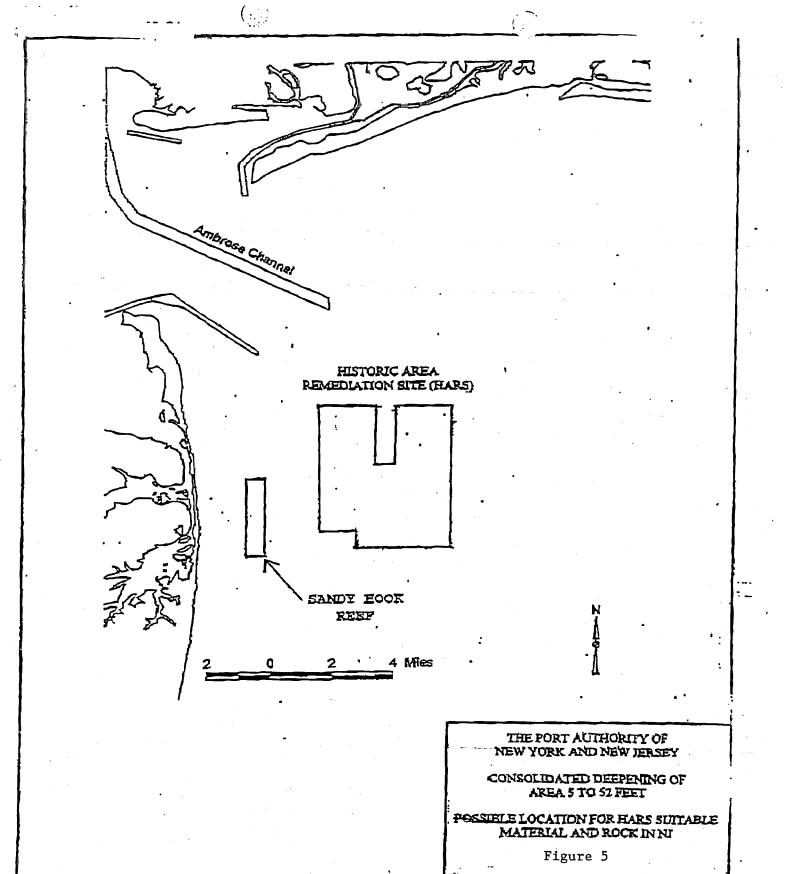
THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

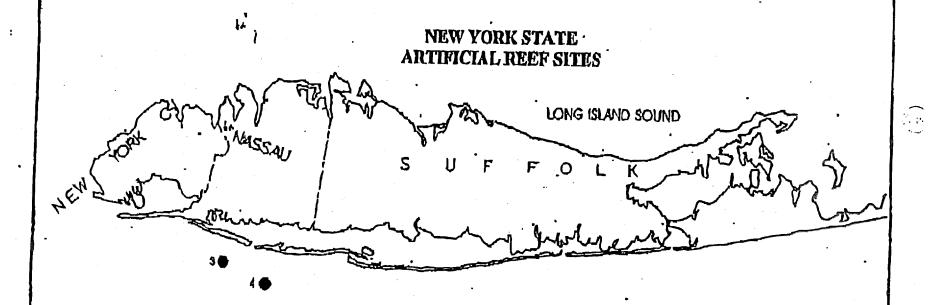
Consolidated Deepening of Area's to 52 feet

PLAN VIEW EXISTING BATHYMETRY

Figure 4d







THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

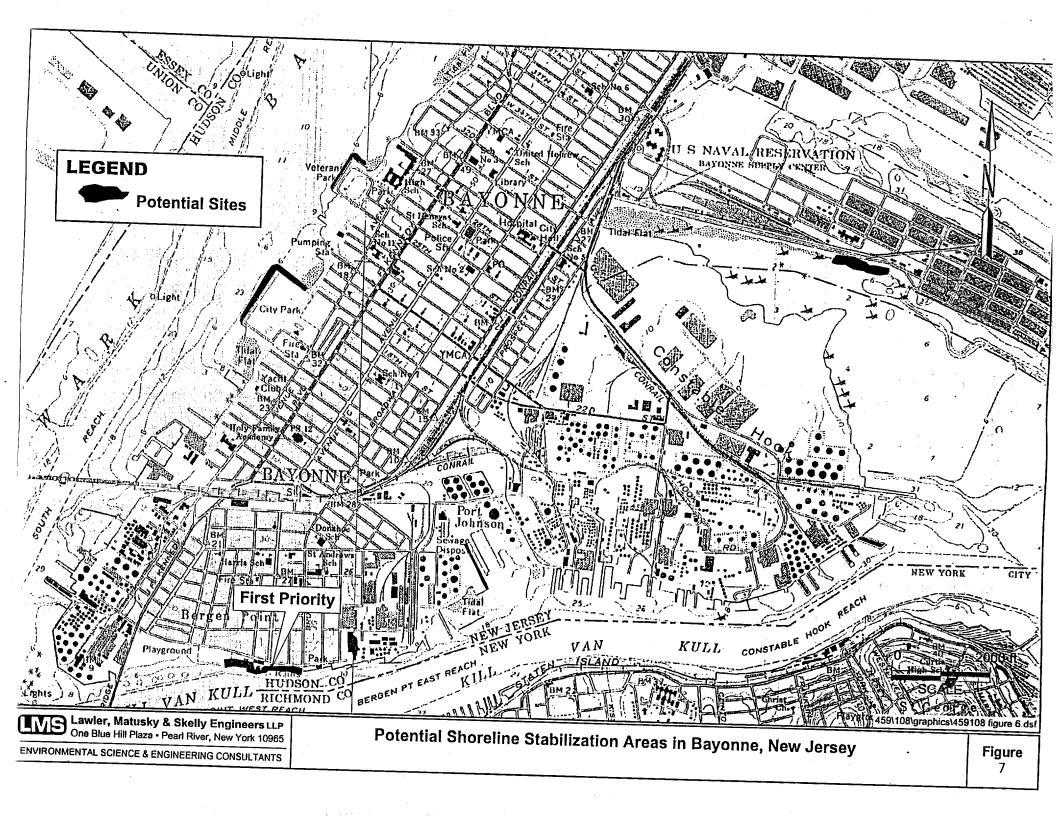
CONSOLIDATED DEFENING OF AREA 5 TO 52 FEBT

Possible location for rock in my

Figure 6

3. ESHINGLIVE REEF SITE

4. HEMPSTED TOWN ARTIFICIAL REEF SITE



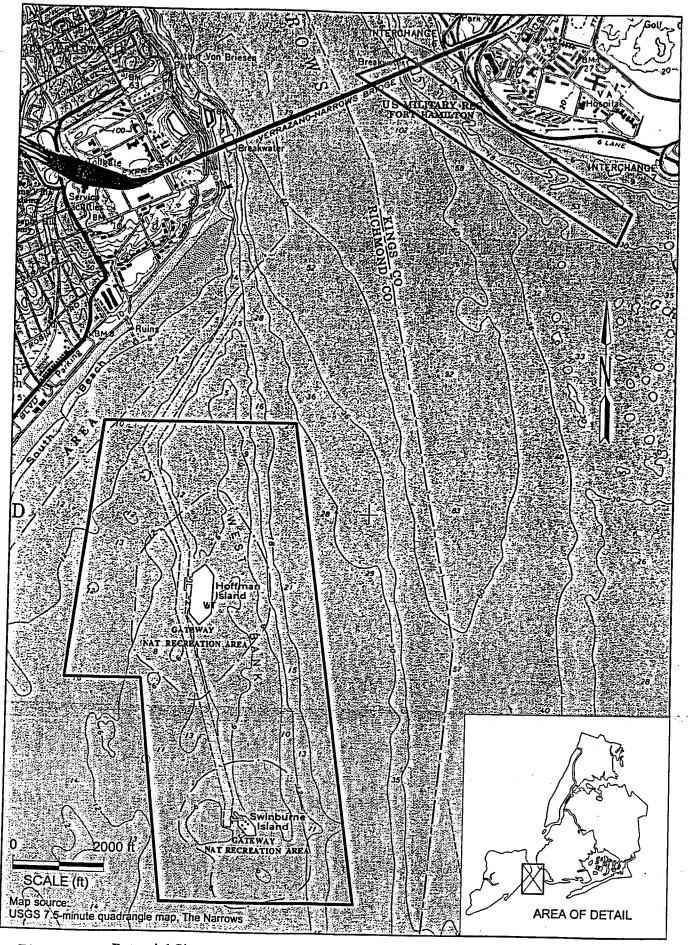
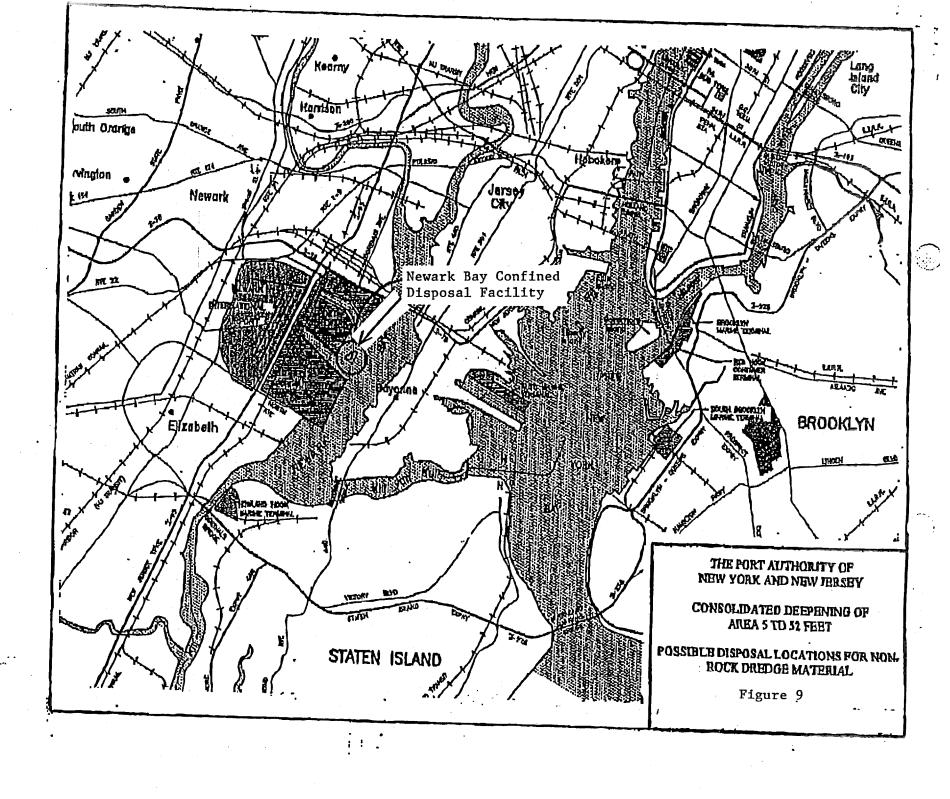


Figure 8 . Potential Sites for Rock Reefs With Lobster as Target Management Species



NEWARK BAY/STATEN ISLAND KILLS COMPLEX—NATURAL CLAYS

Table-1 TOXICITY TEST RESULTS

Suspended Particulate Phase-Raw Clay

Test Species	Test Duration	LC50/EC50	
Menidia beryllina	96 hours	(b) >100%	LPC(a)
Mysidopsis bahia Mytilus sp.	96 hours	(b) >100%	>1
(larval survival) Mytilus sp.	48 hours	(b) >100%	>!
larval normal develop.)	48 hours	(c) >100%	>!

- (a) Limiting Permissible Concentration (LPC) is the LC50 or EC50 times 0.01.
 (b) Median Lethal Concentration (LC50) resulting in 50% mortality at test termination.
- (c) Median Effective Concentration (EC50) based on normal development to the D-cell, prodissoconch 1 stage.

Whole Sediment (10 days)-Raw Clay

Test Species	% Survival % S	urvival	
Ampelisca abdita Mysidopsis bahia	89% in 8	Test Reference - Test	significant? (a = 0.05)
(a) Survival in the test materi	ial was greater than in the Reference.	3%	No No

(a) Survival in the test material was greater than in the Reference.

Table 2 . NEWARK BAY/STATEN ISLAND KILLS COMPLEX - NATURAL CLAYS RESULTS OF CHEMICAL ANALYSIS OF SITE WATER AND ELUTRIATE

CONSTITUEN	TS DEFENSE	TE WATER		
	TS DETECTION LIMI	15 CONCENTRATION	ELUI	KIATE
Metals		11()	DETECTION LIMITS	CONCENTRA
Cadmium	ppb (ug/L)	ppb (ug/L)		
Chromium		0.093	ppb (ug/L)	ppb (ug/L)
Сопрет		1.42		0.267
Lead		2,45		1.11
Mercury,		1.46	·	6.42
Nickel		110.0		0.259
Silver		1,58	-	0.002
Zinc				1,70
		0.054		0.016
Pesticides		11.7		3.56
Aldrin	(ppt) ng/L	-1	f.,	90
doha-Chlordane	2.0	(porr) ng/L	(ppir) ng/L	(mars) #
		ND	0.8	(pptr) ntr/L
trans-Nonachior		1.9		ND
Dieldrin	0.3	3.7		
4.4'-DDT		ND		1.8
2.4'-DDT	0.7	4.6	-	3.1
4,4'-DDD	0.7	ND	0.7	3.1
Z4'-DDD		2.5		ND
1.4'-DDE		1.7		5.0
4DDE		4.6		1.0
oral DDT	1.4	ND	1.4	6.0 ·
ndosvifan i	· i	14.45		ND
ndosulfun II		2.0		16.15
ndosvifun sulfate	0.5	DN		1.2
entachior	2.4	טא		1.8
eptachlor epoxide	 	3.3		2.7
	<u> </u>	11		4.0
descript Chemicals	(man)			5.3
B BZ-X	(pptr) ne/1.	(opte) ne/L	(mars) and	
B 82-18		0.9	(potr) np/1.	(btn) u8/1"
8 8Z-ZX		` 7.6	0.1	ND .
8 82.44	. 0.1	ND	0.1	ND .
3 132-49	0.1	ו טא	0.1	שא
BZ-52	0.1	ו טא	0.1	ND
BZ-66	0.1	ND	0.1	ND
BZ-87		0,6	0.1	ND
BZ-101	0.1	ND	0.1	ND
B7-105		0.7		ND
BZ-118	0.1	ND	0.1	NO
B7-128	1.0	ND	0.1	UN
BZ-138	0.1	טא	0.1	ND
BZ-153	1.0	ND'	0.1	ND
BZ-170	0.1	ND	0.1	NO
BZ-180	1.0	ND	0.1	ND
BZ-183	0.1	ND	0.1	ND
BZ-184	. 0.1	ND	0.1	NO
UZ-187	0.1	ND	0.1	ND
BZ195	0.1	ND	0.1	ND
3Z-206	0.2	ND	0.1	ND
3Z-209	0.2	ND	0.2	ND
PCB	0.1	ND		0.5
.708			0.1	ND
ne detected		21.6		3.3
Or Metanous				

Total DDT = sum of 2,4'- and 4,4'-DDD, DDE, and DDT.

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Table 3 .. NEWARK BAY/STATEN ISLAND KILLS COMPLEX - NATURAL CLAYS
28-DAY BIOACCUMULATION TEST RESULTS: CHEMICAL ANALYSIS OF TISSUE (in wet weight concentration)

	1	Macoma nasuta REFERENCE											
	De	efection LEST						Nereis vire	าร				
Constituen		"	lean	Detect	tion M	lean	Dec	ction				TEST	
		Conce	Concentration			nuation	l .		Mea		etection	Mean	
Metals	1	g/a I					LII	mits	Concentr	ation	Limits	Concent	
Arsenic			g/g	ug/g	111	g/g		· ·				1 0000000	
Cadmium		 3	.5			36	บูย	z/g	นธ/g		ug/g	1 11-1	
Chromium		0.	05			148			3.26			ug/s	
Copper ·		0.9	48						0.068	-			
Lead		8.	34			68	<u>. </u>		0.338			0.06	
Mercury		0.5	36			.18			2.32			0.321	
Nickel	 	0.1	6		0.4				0.704			2.14	
Silver		1.1	8		0.0				0.13			0.558	
Zine		0.0	8		1.1				0.648			0.138	
		23.6	18		0.0	72			0.036			0.666	
Pesticides .					22.4	52			24		.04	MD	
Aldrin	ng/	g ng/	, ,									14.56	
		1.79		ng/g	ng/	g	ng/g	,					
alona-Chlordane		0.60		0.164	ND				US/B	D:	ā\ā	uā,ā	
rans-Nonachlor		0.46			0.16	5			4.36		T	5	
Dieldrin					0.44	5	0.18		0.2			0.625	
.4'-DDT		1.23			1.314	4	V.18		ND	0.1	82	DM	
.4'-DDT		0.185			0.27				1:814			1.278	
.4'-DDD		1.224			0.634		0.533		1.108			0.521	
4'-DDD		2.82			2.52		0.532		ИD		_	• 0.908	
.+"-DDE		0.738			0.493				3.88			5.92	
4'-DDE	0.14	3.98	$-\Gamma$		4.66				0.67			0.616	
ord DDT	0.14	_ ND		0.138	ND				1.505	T		0.589	
dosulfan I		9.152			8.646				0.762		-	0.389	
idosulfan II		1.96			1.6				7.925				
dosulfan sulfate		0.175			0.127				1.88	 		9.324	
ptachlor ·		0 36		1.106	• ND	_!_	0.216		ND	 		2.08	
ptachlor epoxide	0.252	ND				- 	1.16		ND	1.16		0.196	
		1.62			0.157		0.258		ND	1		• ND	
ustrial Chemicals	-,				1.92		•	1	1.128	 		• 0.582	
B BZ-08	ng/g	บธิ/ลิ		ng/g						<u>'</u>		1.04	
BZ-18		1.542		- E E	. มธั\ธิ		ng/g		ngig	1			
BZ-28		1.404			0.976				.235	₽Ē\Ē		uã,ã	
BZ-44	0.54	l ND	+	500	0.902	_1			0.62		!	1.563	
BZ-49		0.738		.508	• ND				77	<u> </u>		0.798	
BZ-52.		0.959	 -		0.498				486			• 0.738	
		0.134		.36	ND	1			974			0_397	
BZ-66		1.04		.47	• ND	0	486			0.36		ND	
BZ-101		1.04	1.1	800	ND		.06		(D			0.628	
BZ-105	0.394				0.798	 			ID	1.012		• ND	
BZ-118	0_578	ND		37	ND	 			906			0.614	
BZ-87	1	ND	0.5	44	• ND	+			63			0.324	
BZ-128	0.658	0.138	0.4	16	* ND	1 -	176		12			0.604	
BZ-138	0.412	ND	0.6	18	* ND		176	N		0.46		* ND	
BZ-153		ND	0.3		*ND	0.0	42	N		0.616		ND	
BZ-170	0.384	ND	0.3		ND	+		1.1	44).848	
BZ-180	0.354	ND	0.33	,		 		1.5	4			.654	
BZ-183	0.344	ND	0.32		ND	- 0.3	46	NI)	0.332			
3Z-184	0.422	ND	0.37		ND			0.38	2			ND	
3Z-187	0.568	ND	0.53		• ND	0.4	12	NE		0.396	_	244	
3Z-187	0.304	ND			* ND ·			1.2		U.J70		ND	
	0.254	ND	0.28		ND	0.29	6	ND				928	
Z-206	0.254	ND	0.23		ND		_	0.30				239	
Z-209	0.206	ND	0.238		ND	0.24	8			0.555	0.	298	
CB	-		0.194		ND	0.2		ND		0.238	1 1	Œ	
		16.562	_	1	20.536			ND	- 1	0.194	1	D	

Table 3 cont: ---- NEWARK BAY / STATEN ISLAND KILLS COMPLEX - NATURAL CLAYS 28-DAY BIOACCUMULATION TEST RESULTS: CHEMICAL ANALYSIS OF TISSUE (in wet weight concentration)

		Macoma nasuta REFERENCE										
	Detect	REFERENCE			TEST		Nereis virens REFERENCE					
Constituents	,	ivican		ection			RE	THE PIPER				
	Limi	ts Concentra	•:	mits	Mear		Detection	Mean			TEST	
Dioxins and Furans					Concentra	ition	Limits	Concentrati	_ 1	ection	Mean	
2378-TCDD				2/g					Oii Li	mits	Concentrati	
12378-PeCDD	0.11			105	pg/g		pg/g	pg/g				
123478-HxCDD	0.172	ND		34	ND			0.237	P	g/g	pg/g	
123678-HxCDD		0.197		77	ND			0.431		<u> </u>	0.177	
123789-HxCDD		3.250		"	ND			0.296	 		0.252	
1234678-HpCDD		1.410			1.632	T		3.230			0.172	
OCDD		16.250			0.665			1.423			1.580	
2378-TCDF		12.441			7.424	T			+		0.661	
12378-PeCDF	0.239	ND			7.929			10_308		T	5.255	
23478-PeCDF		0.650	0.14	13	ND			1.001			6.714	
123478-HxCDF	0.874	ND			0.317				1		0.691	
123678-HxCDF		0.410			0.336	\neg		1.130			0.442	
123789-HxCDF		0.689		$-\bot$	0.282	1		0.713			0.259	
734679 W.CDF	0.668	ND			. 0.348	_		0.631	0.34	7	ND	
234678-HxCDF		0.900	0.310		ND	一	0.155	0.919			0.384	
1234678-HpCDF		4.140			0.476	+	0.133	ND	0.40	7	• ND	
234789-HpCDF		0.276	<u>-</u>		2.194	'- -		1.145			0.279	
ΥĆήΕ	T	2.022	0.273		ND -		0.347	2.473		-	1.515	
117		1 2.027			2.355	+-	0347	. י מא	0.446		ND	
AHs	ng/g	T				<u> </u>		0.809			0.731	
cenachthene	1	ng/g	ng/g		ng/g	_					0.731	
cenaphthylene	1 56.4	4.29			3.84	+	ng/g 3.75	υã∖ã	ng/g		Baia	
nthracene	1.98	ND	56.2	_	• ND		56.5	ע מא	3.78	+	ND ND	
uorene	3.56	ND,	2.0		ND		2.0	ND	56.4	_	• ND	
ohthalene	1 1.7	ND	3.6		ND			ND	2.0	$\overline{}$	ND	
enanthrene		ND 0.78	1.7	1.	ND		3.55	ND	3.58		ND	
azo(a)anthracene	1 1.6	0.78	1.3		ND		1.7	ND	1.7		ND	
nzo(a)pyrene	J	ND	1.6		ND		1.3	ND	1.3		ND	
zo(g,h,i)perylene	1.4	0.8	1.3	T	ND		1.0	ND	1.6	+-	ND	
zo(b)fluoranthene	1.4	ND I	1.4	T	ND		.4	ND	1.3	'	ND	
zo(k)fluoranthene ·	1.2	ND I	1.4	T	ND			ND	1.4	+-	ND	
vsene		ND I	1.2	T	ND		.4	ND	1.4	+-	ND	
nz(a_h)anthracene	1.6	2.44	2	T	ND		2	ND	1.2	- 	ND	
ranthene	3.16	ND I	1.6	7	ND			ND	2	 		
no[1,2,3-cd]pyrene	0.822	ND I	3.2		ND			ND	1.6	+	ND	
ne		ND	0.822		ND	3.1		ND	3.18		ND	
	<u> </u>	2.12			1.68	0.8	12	ND	0.822		ND	
PAHs								1.263			ND	
		19.64			3.281						1.1	

Concentrations shown are the mean of 5 replicate analyses in wet weight with the following exceptions: PAH concentrations for Nereis virens Reference tissue are the mean of 4 replicate analyses;

Total PAHs = sum of all PAHs

Total PCB = sum of congeners reported * 2

Total DDT = sum of 2.4'- and 4,4'-DDD, DDE, and DDT

Means and statistical comparisons were determined using conservative estimates of concentrations of constituents that were at concentrations below

^{1,4} dichlorobenzene concentration for Nereis virens Test tissue is the mean of 4 replicate analyses due to limited tissue volume;

^{1,4} dichlorobenzene concentration for Nereis virens Reference tissue is the result of one set of analyses due to limited tissue volume. ND = Not Detected

Table 3 cont: NEWARK BAY/STATEN ISLAND KILLS COMPLEX - NATURAL CLAYS 28-DAY BIOACCUMULATION TEST RESULTS: CHEMICAL ANALYSIS OF TISSUE (in wet weight concentration)

•					CULL WILLY	LYSIS OF	TISSUE (in w	et weight co	ncentration)
	Constituents	REF Detection Limits	Macoma ERENCE Mean Concentration ND	Detection	EST Mean Concentration ND	REFI Detection		virens 7 Detection	EST Mean Concentration ND